LISTING OF THE CLAIMS

This listing of claims, amended as indicated below, replaces all prior versions, and listings, of claims in the application

1. (Currently Amended) A system for cerebral temperature control of a living being, comprising:

- a first double lumen balloon catheter configured to be introduced through a nostril of a living being; said double lumen balloon catheter ~~means~~ comprising:

  a first lumen and a second lumen, said first and second lumens being in fluid communication by means of ~~through~~ respective openings, said second lumen being configured as an expandable first balloon;

- a second double lumen balloon catheter configured to be introduced through another nostril of said living being; said second double lumen balloon catheter comprising a third lumen and a fourth lumen, said third and fourth lumens being in fluid communication by means of respective openings, said fourth lumen being configured as an expandable second balloon;

- a temperature regulator connected to a reservoir comprising a fluid, said temperature regulator being configured to regulate the temperature of said fluid;

- a circulation mechanism operative to pass said temperature regulated fluid to each of said first and second catheters from said reservoir into said first lumen, from said first lumen into said second lumen, and out from said second lumen, and from said reservoir into said third lumen, from said third lumen into said fourth lumen, and out from said fourth lumen,

whereby said first and second balloons, when in use, are expandable to cover the inner surfaces of the nose.

2. (Original) The system of claim 1, wherein said temperature regulated fluid is circulated in a closed fluid system.

3. (Canceled).

4. (Currently Amended) The system of claim [[3]] 36, wherein each of said double lumen balloon catheters comprises:

- an inlet in fluid communication with said reservoir and with said first lumen, said inlet being configured to receive said fluid from said reservoir;
- said first lumen having a set of distal end openings in a front end portion of said first catheter said end openings being arranged in fluid communication with said second lumen; and
- an outlet in fluid communication with said second lumen and with said reservoir.

5. (Previously Presented) The system of claim 4, wherein said inlet and outlet are arranged at an end portion of said first catheter.

6. (Previously Presented) The system of claim 1, wherein said circulation of said fluid is accomplished by the hydrostatic pressure of said fluid in said reservoir.

7. (Currently Amended) The system of claim 1, wherein said circulation mechanism further comprises [[a]] a pump connected by tubing between said reservoir and said catheters.

8. (Previously Presented) The system of claim 1, wherein said circulation mechanism is configured to provided a flow rate of 200 - 1000 ml/min.

9. (Previously Presented) The system of claim 1, further comprising a pressure regulating nozzle located in the tubing at the reservoir, said pressure regulating nozzle being configured to provide a resistance in the tubing.

10. (Currently Amended) The system of claim 1, further comprising a temperature sensor ~~configured to be positioned~~ positionable in an auditory canal of a living being, to provide an estimate of the temperature of the brain and to control the temperature regulator to regulate the temperature of the fluid in the reservoir.

11. (Previously Presented) The system of claim 10, wherein said temperature sensor is an IR thermistor positionable in the auditory canal of the living being.

12. (Original) The system of claim 10, wherein said desired brain temperature level is approximately 31- 32 degrees Celsius.

13. (Previously Presented) The system of claim 1, wherein said catheters are manufactured of a material selected from the group comprising plastic, synthetic latex, silicone and Gore-Tex®.

14-18 (Canceled).

19. (Previously Presented) A method for cerebral temperature control, comprising the steps of:

- introducing a double lumen balloon catheter through a nostril of a living being;
- placing said catheter adjacent the level of the back of the tongue;
- regulating the temperature of a fluid in a reservoir;
- circulating said temperature regulated fluid from said reservoir into a first lumen of said catheter from said first lumen into a second lumen of said catheter and from said second lumen back to said reservoir,

whereby the balloon is expanded to cover the inner surface of the nose.

20. (Currently Amended) The method of claim 19, wherein said step of circulating said temperature regulated fluid comprises the step of pumping said fluid from said reservoir to said catheter and back to said reservoir via said first and second lumens by a ~~pumping~~ pump

21. (Previously Presented) The method claim 19, wherein said temperature regulated fluid circulates at a flow rate in the range of approximately 200 - 1000 ml/min.

22. (Currently Amended) The method of claim 19, further comprising the steps of:

placing a temperature sensor in an auditory canal of the living being;
estimating the brain temperature by means of said temperature sensor; and
regulating the temperature the fluid in dependence of said estimated brain temperature.

23. (Currently Amended) The method of claim 22, wherein the step of ~~temperature~~ regulating the temperature of the ~~said~~ fluid comprises the step of cooling said fluid in order to obtain a brain temperature of approximately 31 - 32 degrees Celsius.

24. (Canceled).

25. (Currently Amended) The system of claim 1, wherein said double lumen balloon catheters ~~are~~ have a length of approximately 20 to 25 cm. ~~in length.~~

26. (New) The system of claim 1, wherein said double lumen balloon catheters have a diameter at a front part of approximately 2 to 4 cm.

27. (New) The system of claim 1, wherein said double lumen balloon catheter have a diameter at a base part of approximately 1 to 3 cm.

28. (New) The method of claim 19, wherein said double lumen balloon catheter has a length of approximately 20 to 25 cm.

29. (New) The method of claim 19, wherein said double lumen balloon catheter has a diameter at a front part of approximately 2 to 4 cm.

30. (New) The method of claim 19, wherein said double lumen balloon catheter has a diameter at a base part of approximately 1 to 3 cm.

31. (New) The system of claim 9, wherein the pressure regulating nozzle is arranged for providing a resistance in the tubing for expanding the double lumen catheter.

32. (New) The method of claim 19, further comprising:
circulating the temperature regulated fluid through a system of tubing; and
regulating fluid pressure in the tubing by a pressure regulating nozzle located in the tubing at the reservoir, for providing a resistance in the tubing.

33. (New) The method of claim 19, further comprising:
regulating a pressure of the circulating fluid by a pressure regulating nozzle for expanding the double lumen catheter.

34. (New) The system of claim 1, wherein said first double lumen balloon catheter is configured to be introduced through the nostril of a living being to a position which is not further than adjacent the level of the back of the tongue.

35. (New) The system of claim 1, wherein said second double lumen balloon catheter is configured to be introduced through the nostril of a living being to a position which is not further than adjacent the level of the back of the tongue.

36. (New) The system of claim 1, wherein said circulation mechanism comprises tubing connecting said catheters to said reservoir.

37. (New) A kit of disposables for use in the system according to any of the claims 1, 2, 4-13, 25-27, 31 and 36, comprising:
two replacement double lumen balloon catheters; and
tubing configured for connecting the catheters to said reservoir,
said catheters and said tubing being disposable after use.

38. (Canceled)